

WHAT IS CLAIMED IS:

1. Method for data connections in a cellular mobile communication network with at least one core network and at least one access network, said method
5 comprising the steps of:

receiving a connection request in a first control node of the core network from a first access network;

transferring of a call control from the first control node to a gateway control node interacting with
10 a home location register that manages subscriber data of a called party;

fetching of routing information by the gateway control node from said home location register;

transferring of the call control from the gateway control node to a control node that controls the access
15 network serving the called party;

calculating parameter values describing possible payload connections between the core network and the access networks;

20 comparing parameter values describing possible payload connections between the core network and the first access network, with parameter values of possible

payload connections between the core network and the
access network serving the called party;

selecting transcoding and data rate of the payload
in the respective payload transmission resources,
5 according to the results of the comparison; and

setting up and through-connection of the selected
payload transmission resources.

2. Method according to claim 1, including the
step wherein the first control node seizes first payload
10 transmission resources, and the control node that
controls the access network serving the called party
seizes second payload transmission resources before
comparison of parameter values is performed, which
describes possible payload connections between the core
15 network and the first access network, with parameter
values of possible payload connections between the core
network and the access network serving the called party.

3. Method according to claim 1 including changing
a payload transmission and executing a further
20 comparison and selection.

4. Method according to claim 1, including the
step wherein at least one transmission converter is
linked in for the payload transmission.

5. Method according to claim 1, wherein an interworking function is linked in for the payload transmission.

6. Method according to claim 1, including sending
5 a calling party identification, as part of the call control handover between the control nodes.

7. Method according to claim 1, including the step of sending an identification of the first control node as part of each call control handover between
10 control nodes that occurs after the call control has been handed over to the gateway control node.

8. Method according to claim 1, including the step of performing comparison and selection of transcodings and rate adaptations after the called party
15 accepts the connection.

9. Method according to claim 1, wherein at least two of said control nodes are identical.

10. Method according to claim 1, wherein the access networks are identical.

20 11. Method according to claim 1, wherein the method is performed in a Universal Mobile Telephone System (UMTS) or a Global System for Mobile Communication (GSM) network.

12. A network node for a cellular communication network that offers data connections, comprising a connection calculation unit for the calculation of parameter values describing possible payload connections
5 between said network node and an access network, a parameter comparison unit for the comparison of said calculated parameter values with parameter values received from a further network node and a processing unit for handling input and output of parameter values,
10 and seizure of payload transmission resources and the set up and through-connection of a payload connection.

13. A network node for a cellular communication network that offers data connections comprising a connection calculation unit for the calculation of
15 parameter values describing possible payload connections between said network node and an access network and a processing unit for handling input and output of parameter values, and seizure of payload transmission resources and the set up and through-connection of a
20 payload connection.

14. A cellular communication network, comprising a first access network, a second access network and a

core network, performing a method for the set up of data connections according to claim 1.

15. A computer program stored on computer readable medium or in a computer memory that can execute a method
5 according to claim 1.

16. A method of operating a reliable link protocol, comprising the step of setting, at an exchange identifier negotiation, time out values before an exchange identifier command is sent again, on different
10 values for a call originating user equipment and a call terminating user equipment.